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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/082,513 02/25/2002 Timothy S. McAbee 1739A1 3006 EXAMINER 23342 7590 03/15/2004 KILPATRICK STOCKTON LLP CHOI, STEPHEN 1001 WEST FOURTH STREET PAPER NUMBER ART UNIT WINSTON-SALEM, NC 27101 3724 DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	-	A	
Office Action Summary	Application No.	Applicant(s)	
	10/082,513	MCABEE ET AL.	-
	Examiner	Art Unit	
	Stephen Choi	3724	
The MAILING DATE of this communication app	pears on the cover sheet wit	h the correspondence address	
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a re y within the statutory minimum of thirty will apply and will expire SIX (6) MON a, cause the application to become AB	ply be timely filed (30) days will be considered timely. HS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 12 D	ecember 2003.		
2a) This action is FINAL . 2b) ☐ This	action is non-final.	·	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) <u>1-20</u> is/are pending in the application.			
4a) Of the above claim(s) <u>16-20</u> is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-15</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examine	er.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct	,		
11) The oath or declaration is objected to by the Ex	kaminer. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119	•		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Aprity documents have been u (PCT Rule 17.2(a)).	oplication No received in this National Stage	
•			
Attachment(s)	_		
1) Notice of References Cited (PTO-892)		ummary (PTO-413) /Mail Date	
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10</u>. 		formal Patent Application (PTO-152)	

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-7 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cote (US 6,360,640) in view of Green (US 4,512,225).

Cote discloses the invention substantially as claimed except for a sensor system. Green teaches a sensor system (36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the sensor system as taught by Green on the device of Cote in order to provide real time control of rolls to obtain accurate cutting. Regarding claim 2, the sensor system of Green senses rotational position. Regarding claims 3-7 and 13, see col. 3-4 of Green.

3. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cote (US 6,360,640) in view of Green (US 4,512,225) as applied to claim 1 above, and further in view of Applicant Admitted Prior Art (hereafter AAPA).

The modified device of Cote discloses the invention substantially as claimed except for a plurality of slots. AAPA discloses slots are old and well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ slots as taught by AAPA on the modified device of Cote as an alternative counter structure.

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4. Claims 10-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cote (US 6,360,640) in view of Green (US 4,512,225) as applied to claim 1 above, and further in view of Okahashi (US 5,720,210).

The modified device of Cote discloses the invention substantially as claimed except for the sensor system further operable to measure a radial spacing and the drive system further operable to adjust the radial spacing. Okahashi discloses a sensor system having a sensor (29, 30) for sensing a radial spacing and a drive system for adjusting the radial spacing (34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a radial spacing controlling mechanism as taught by Okahashi on the modified device of Cote in order to maintain correct radial spacing to reduce deterioration and wear of severing structures.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cote (US 6,360,640) in view of Green (US 4,512,225) and Okahashi (US 5,720,210).

Cote discloses the invention substantially as claimed except for a sensor system and a drive system as claimed. Green teaches a sensor system (36) as claimed except for the sensor system further operable to measure a radial spacing and the drive system further operable to adjust the radial spacing. Okahashi discloses a sensor system having a sensor (29, 30) for sensing a radial spacing and a drive system for adjusting the radial spacing (34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the sensor system as taught by Green and the radial spacing controlling mechanism as taught by Okahashi on the device of Cote in order to provide real time control of rolls to obtain accurate cutting while

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maintaining correct radial spacing to reduce deterioration and wear of severing structures.

Response to Arguments

6. Applicant's arguments filed 12 December 2003 have been fully considered but they are not persuasive.

Regarding claims 1 and 12, applicants contend that neither Cote nor Green teach or suggest a sensor system operable to make measurements and generate current signals representative of at least one actual current roll property of the first roll and at least one actual current roll property of the second roll since Cote does not disclose a sensor system and Green only teaches measuring the distance of travel of knife on one of knife cylinders because the knife cylinders are interlocked. Applicants further contend that neither Cote nor Green teach or suggest a control system as claimed.

The examiner respectfully disagrees. Although Green teaches the sensor system measuring actual current roll property of only one of the rolls since the rolls are interlocked, one of ordinary skill in the art would have been motivated to provide the sensor system measuring current roll property of both rolls on the device of Cote since Cote teaches a system operating the rolls independently using a control system generating velocity profile that enables the rolls to cut the workpiece at the desired length and the proposed modification would only have involved mere duplication of the essential working parts of a device which is routine skill in the art. Furthermore, although Cote does not explicitly disclose a sensor system and a control system receiving signals from the sensor system, the device of Cote inherently has a

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mechanism that recognizes the velocity of the rolls in order to set a desired velocity of the rolls by a control mechanism such that the control system on the modified device of Cote would behave as recited in claims 1 and 12.

Applicant's arguments, see page 25, lines 12-14, filed 12 December 2003, with respect to claim 15 have been fully considered and are persuasive. The rejection of claim 15 has been withdrawn. Although it should have been clear from the previous office action that the examiner intended to reject claim 15 in view of Cote, Green, and Okahashi similar to the rejection on paragraph 6 of the previous office action since claims 10-11 and 14 recite limitations related to the substantially same subject matter, the examiner inadvertently rejected claim 15 in view of Cote and Green instead. Hence, this office action is made Non-Final.

Regarding claims 8-9, applicants contend that Cote is directed to methods and systems of cutting ribbons which does not relate to AAPA.

The examiner respectfully disagrees. Cote discloses an apparatus for cutting an elongate workpiece which is in the field of applicant's endeavor. It is noted that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Regarding claims 10-11 and 14, see the examiner's response with respect to claims 1 and 12 set forth above.

Conclusion

7. This action is made Non-Final.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Choi whose telephone number is 703-306-4523. The examiner can normally be reached on Monday thru Friday between 9am and 5pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 703-308-1082.

In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703-308-1148.

SC

March 12, 2004

STEPHEN CHO! PRIMARY EXAMINER Page 6